

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-27. (Cancelled without prejudice).

28. (New) A nano carbon ball for deodorization comprising a mesoporous shell and having a hollow core, wherein said mesoporous shell has a thickness of 50 nm to 500 nm and said hollow core has a diameter of 10 nm to 1,000 nm, wherein said mesoporous shell comprises carbon, and wherein said nano carbon ball is impregnated with at least one metal composition selected from the group consisting of a transition metal, a transition metal oxide, an alkali metal salt, and mixtures thereof.

29. (New) The nano carbon ball according to claim 28, wherein the transition metal is selected from the group consisting of copper, iron, manganese, nickel, cobalt, silver, gold, vanadium, ruthenium, titanium, chromium, zinc and palladium.

30. (New) The nano carbon ball according to claim 28, wherein the transition metal oxide is selected from the group consisting of the oxides of copper, iron, manganese, nickel, cobalt, silver, gold, vanadium, ruthenium, titanium, chromium, zinc and palladium.

31. (New) The nano carbon ball according to claim 28, wherein the alkali metal salt is selected from the group consisting of sodium bromide, sodium iodide, potassium bromide, potassium iodide and potassium iodate.

32. (New) The nano carbon ball according to claim 29, wherein the transition metal is copper and manganese.

33. (New) The nano carbon ball according to claim 29, wherein the transition metal is copper, iron and zinc.

34. (New) The nano carbon ball according to claim 29, wherein the transition metal is vanadium, ruthenium and titanium.

35. (New) The nano carbon ball according to claim 31, wherein the alkali metal salt is potassium iodide.

36. (New) The nano carbon ball according to claim 28, wherein the nano carbon ball is impregnated with an amount of the at least one metal composition of from about 0.01 wt. % to about 30 wt. % on the basis of a total weight of the nano carbon ball.

37. (New) The nano carbon ball according to claim 36, wherein the amount of the at least one metal composition is from about 0.01 wt. % to 10 wt. % on the basis of the total weight of the nano carbon ball.